

ABSTRACT

A radio receiving apparatus and radio receiving method are provided that enable the overall apparatus circuit scale to be reduced, and small apparatus size and low apparatus cost to be achieved, without increasing the processing load, together with a mobile station apparatus and base station apparatus equipped with this radio receiving apparatus. A phase control section (290) holds a phase rotation amount of each subcarrier signal due to the delay in the sampling timing of the second antenna with respect to the first antenna, decided in advance according to the number of antennas of the radio receiving apparatus and the subcarrier frequencies. The phase control section (290) performs phase rotation by the held phase rotation amount of each of N subcarrier signals output from an FFT section (240-2) corresponding to the second antenna.